DRIP IRRIGATION 1 ACRE
JAN 2000

DRIP IRRIGATION SYSTEM
THROW-AWAY PRE-PUNCHED TUBING

ASSUMPTIONS:

Designed for vegetable production, at 6 ft. or less row spacing.
Limited amount of water needed. Assuming water is near planting site, 90% water efficiency, provides 1.25" water/week.
38 GPM : operate 15 hrs. per week.
Six gallons of gasoline consumption per week (gas @ $1.25/gallon).
Use electric motor to reduce maintenance and labor where possible.
If you have sediment problems, you will need a sand filter, which averages $1200 and is capable of servicing 3-4 acre zones. If using high-quality well or municipal water, a screen filter will be needed. The screen filter costs $200. If filters are not used, the pre-punched holes clog quickly, ruining efficiency. Total irrigation costs exclude labor and maintenance.

ITEMS	UNITS	COSTS	TOTAL COSTS
8 MIL biwall pre-punched tubing	7500 FT	$0.017	$128
Fittings, connections, etc.	1 SET	$25.00	$25
2" lay flat headers and main	300 FT	$0.30	$90
2 HP electric motor and pump	1 EA	$700.00	$700
Suction line and foot valve	1 EA	$75.00	$75
Gauges and pressure regulator	1 EA	$50.00	$50
Sand filter system	1 EA	$1,200	$1,200
TOTAL MATERIALS COST:			$2,268

ESTIMATED ANNUAL COSTS	COSTS BY LIFE	ANNUAL COSTS (10% INT)
Pump and filter system: 10-year life	$1,900	$309
Headers, fittings, gauges: 5-year life	$75.00	$20
Biwall pre-punched emitter tubing: 1-year life	$127.50	$140
Motor operating cost (8-week growing season)		$24
TOTAL MATERIALS COST:	$2,103	
TOTAL ANNUAL IRRIGATION COSTS:		$493